

English Translation of Annexes of
International Preliminary Examination
Report

- 7/10/05
1. Method for reserving, on at least one node of an Ethernet bus type
5 communication network, a predetermined fraction of the bandwidth of the digital
bus during a cycle; characterized in that it consists in:
- having a token circulate between all the nodes of the network (A, B,
C, D) so as to enable all the nodes of the network to send in turn a data packet
over the bus (1) according to a predefined sequence defining a chronological
10 order of passage of the token between all the nodes during a cycle; and
 - in which the predetermined fraction of the bandwidth reserved for a
node of the network corresponds in the sequence to a certain number of
occurrences of passage of the token via the node concerned.
- 15 2. Method according to Claim 1, in which the occurrences of passage of the
token via a node of the network are distributed in the sequence among the
occurrences of passage of the token via the other nodes of the network.
- 20 3. Method according to Claim 1 or 2, in which the chronological order of
passage of the token between the nodes of the network is defined by a master
node of the network.
- 25 4. Method according to Claim 3, in which the master node, on initialization
of the network, constructs a first table (2) storing, for each node of the network,
information indicative of the fraction of bandwidth reserved for the node of the
network and, on the basis of the first table, the master node constructs a
second table (2) storing the sequence defining the order of passage of the
token between the nodes of the network.
- 30 5. Communication device designed to be connected to a digital bus
communication network, characterized in that it is configured to have a token
circulate between all the nodes of the network during a cycle and in that it is
organized to construct a first table storing, for each node of the network,
information indicative of a fraction of the bus bandwidth reserved for the node of
35 the network and a second table storing a sequence defining a chronological
order of passage of the token between all the nodes during a cycle, the fraction
of the bandwidth reserved for a node of the network corresponding in the
sequence to a certain number.